



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA-HQ-OAR-2012-0522; FRL-9968-01-OAR]

RIN 2060-AT14

Phosphoric Acid Manufacturing and Phosphate Fertilizer Production Risk and Technology Review Reconsideration

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; notification of final action on reconsideration.

SUMMARY: This action finalizes amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Phosphoric Acid Manufacturing and Phosphate Fertilizer Production source categories. These final amendments are in response to two petitions for reconsideration filed by industry stakeholders on the rule revisions to the NESHAP for the Phosphoric Acid Manufacturing and Phosphate Fertilizer Production source categories that were promulgated on August 19, 2015. We are revising the compliance date by which affected sources must include emissions from oxidation reactors when determining compliance with the total fluoride emission limits for superphosphoric acid (SPA) process lines. In addition, we are revising the compliance date for the monitoring requirements for low-energy absorbers. We are also clarifying one option and adding a new option, to the monitoring requirements for low-energy absorbers.

DATES: This final rule is effective on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: The Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA-HQ-OAR-2012-0522. All documents in the docket are listed on the <https://www.regulations.gov> Web site. Although listed in the index, some information is not publicly available, *e.g.*, confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through <https://www.regulations.gov> or in hard copy at the EPA Docket Center (EPA/DC), EPA WJC West Building, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the EPA Docket Center is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: Ms. Susan Fairchild, Sector Policies and Programs Division (Mail Code D243-02), Office of Air Quality Planning and Standards, Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-5167; email address: fairchild.susan@epa.gov.

SUPPLEMENTARY INFORMATION: *Acronyms and Abbreviations.* A number of acronyms and abbreviations are used in this preamble. While this may not be an exhaustive list, to ease the reading of this preamble and for reference purposes, the following terms and acronyms are defined:

AMP	Alternative monitoring plan
CAA	Clean Air Act
CBI	Confidential business information
CFR	Code of Federal Regulations
EPA	U.S. Environmental Protection Agency
FR	Federal Register

MACT	Maximum achievable control technology
NAICS	North American Industry Classification System
NESHAP	National emission standards for hazardous air pollutants
OMB	Office of Management and Budget
PRA	Paperwork Reduction Act
RTR	Risk and technology review
SPA	Superphosphoric acid
TAC	Total annualized cost
TCI	Total capital investment
TF	Total fluoride
TFI	The Fertilizer Institute
tpy	Tons per year
UMRA	Unfunded Mandates Reform Act

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I. General Information

A. Does this action apply to me?

Categories and entities potentially affected by this reconsideration action include those listed in Table 1 of this preamble.

Table 1. NESHAP and Industrial Source Categories Affected By This Final Action

NESHAP and Source Category	NAICS ¹ Code
Phosphoric Acid Manufacturing Phosphate Fertilizer Production	325312

¹North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this final action. To determine whether your facility would be affected by this final action, you should examine the applicability criteria in the appropriate NESHAP. If you have any questions regarding the applicability of any aspect of this final action, please contact the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section of this preamble.

B. How do I obtain a copy of this document and other related information?

The docket number for this final action regarding the NESHAP for the Phosphoric Acid Manufacturing and Phosphate Fertilizer Production source categories is Docket ID No. EPA-HQ-OAR-2012-0522.

In addition to being available in the docket, an electronic copy of this document will also be available on the Internet. Following signature by the EPA Administrator, the EPA will post a copy of this final action at <https://www.epa.gov/stationary-sources-air-pollution/phosphate-fertilizer-production-plants-and-phosphoric-acid>. Following publication in the **Federal**

Register, the EPA will post the **Federal Register** version and key technical documents on this same Web site.

C. Judicial Review

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final rule is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit (the Court) by **[insert date 60 days after date of publication in the Federal Register]**. Under CAA section 307(d)(7)(B), only an objection to this final rule that was raised with reasonable specificity during the period for public comment can be raised during judicial review. Note, under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce these requirements.

II. Background Information

On June 10, 1999 (64 FR 31358), the EPA promulgated 40 CFR part 63, subpart AA for the Phosphoric Acid Manufacturing source category and 40 CFR part 63, subpart BB for the Phosphate Fertilizer Production source category. On August 19, 2015 (80 FR 50386), the EPA published amended rules for both source categories that took into consideration the technology review and residual risk review required by sections 112(d)(6) and 112(f) of the CAA, respectively. Following promulgation of the August 2015 rule revisions, the EPA received two petitions for reconsideration from The Fertilizer Institute (TFI) and the Phosphate Corporation of Saskatchewan, including: PCS Phosphate Company, Inc.; White Springs Agricultural Chemical, Inc., DBA PCS Phosphate-White Springs; and PCS Nitrogen Fertilizer, L.P., (collectively “PCS”), requesting administrative reconsideration of amended 40 CFR part 63, subpart AA and subpart BB under CAA section 307(d)(7)(B).

In response to the petitions, the EPA reconsidered and requested comment on three distinct issues:

- Compliance deadline for air oxidation reactors used in SPA lines;
- Compliance deadlines for low-energy absorber monitoring provisions; and
- Monitoring options for low-energy absorbers.

The EPA proposed a notice of reconsideration including proposed rule amendments in the **Federal Register** on December 9, 2016 (81 FR 89026). We received public comments from two parties. Copies of all comments submitted are available at the EPA Docket Center Public Reading Room. Comments are also available electronically through <http://www.regulations.gov> by searching Docket ID No. EPA-HQ-OAR-2012-0522.

In this document, the EPA is taking final action with respect to the reconsideration and proposed amendments. Section III of this preamble summarizes the public comments received on the proposed notice of reconsideration, presents the EPA's responses to the comments, and explains our rationale for the rule revisions published here.

We are also restoring a provision of the 1999 maximum achievable control technology (MACT) rules that was inadvertently omitted from the risk and technology review (RTR) amendments to those rules. That provision, related to compliance monitoring, allowed sources a ± 20 -percent variability in the minimum liquid flow rate to the absorber.

III. Summary of Final Action on Issues Reconsidered

The three reconsideration issues for which amendments are being finalized in this rulemaking are: (1) compliance deadlines for air oxidation reactors used in SPA lines; (2) compliance deadlines for revised low-energy absorber monitoring provisions; and (3) monitoring options for low-energy absorbers. A fourth issue, which was identified after the close of the public comment period, is also being addressed in this action. This is the restoration of the ± 20 -

percent variability allowance for the minimum liquid flow rate to the absorber. Each of these issues is discussed in detail in the following sections of this preamble.

A. Compliance Deadline for Air Oxidation Reactors Used in SPA Lines

In the August 19, 2015, amendments to 40 CFR part 63, subpart AA, the EPA revised the SPA process line definition to include oxidation reactors. The EPA received petitions requesting the compliance schedule be changed to allow more time for affected sources to include emissions from oxidation reactors when determining compliance with the total fluoride (TF) emission limits for SPA process lines. In response to the petitions, on December 9, 2016, we proposed to revise the compliance date from August 19, 2016, to August 19, 2018. We did not receive adverse comments on this change. Instead, both commenters stated that they supported this change. Therefore, in this action, the EPA is finalizing the compliance date revision as proposed. The compliance date by which affected sources must include emissions from oxidation reactors when determining compliance with the TF emission limits for SPA process lines is August 19, 2018.¹

B. Compliance Deadlines for Revised Low-Energy Absorber Monitoring Provisions

In the August 19, 2015, amendments to 40 CFR part 63, subpart AA and 40 CFR part 63, subpart BB, the EPA changed the compliance monitoring requirement for low-energy absorbers (*i.e.*, absorbers that are designed to operate with pressure drops of 5 inches of water column or less) to require monitoring of liquid-to-gas ratio in lieu of monitoring influent liquid flow and pressure drop through the absorber. The EPA received petitions requesting the compliance schedule be changed to allow more time for affected sources to comply with these monitoring requirements. In response to the petitions, on December 9, 2016, we proposed to revise the compliance dates from August 19, 2016, to August 19, 2017, to allow owners and operators

¹ Refer to finalized footnotes “c” of Table 1 and Table 2 to subpart AA of 40 CFR part 63.

additional time to obtain and certify the instruments needed to monitor liquid-to-gas ratio. However, in this action, the EPA is revising the compliance dates to no later than August 19, 2018, for existing sources as well as for those sources that commenced construction or reconstruction after December 27, 1996, and on or before August 19, 2015. We are also clarifying that new sources that commence construction or reconstruction after August 19, 2015, must comply with the monitoring requirements for absorbers immediately upon startup.

Both commenters said that the proposed compliance date (*i.e.*, August 19, 2017) for monitoring liquid-to-gas ratio on low-energy absorbers only allows approximately seven months to achieve compliance from the date public comments were due (*i.e.*, January 23, 2017). These commenters asserted that a duration of 7 months may not be sufficient to acquire, engineer, test, and install the requisite technologies. One of the commenters specified that 7 months is not enough time to complete and begin implementing gas flow monitoring plans for at least 20 of their low-energy absorbers. Additionally, the commenter asserted that for at least some of their low-energy absorbers, gas flow meters are likely not feasible due to the saturated (and sometimes supersaturated) conditions of the gas streams that these absorbers handle; therefore, the commenter contended they need more time to assess liquid-to-gas ratio monitoring options and to establish operating limits. The commenter stated that each liquid-to-gas ratio monitoring option requires complicated, time-consuming, and absorber-specific evaluations. For example, to develop regression models, new instrumentation to monitor fan suction pressure and blower amperage must be installed for some absorbers, and facilities need to make changes to their computer programs. Moreover, the commenter stated that once a regression model is developed, they need additional time to establish the liquid-to-gas ratio operating limit by conducting a performance test. This commenter also maintained that for some of their low-energy absorbers

they may need to use an Alternative Monitoring Plan (AMP) to comply with the liquid-to-gas ratio monitoring requirements and 7 months may not be enough time to get approval for the AMP. The commenter cited a specific example where the EPA Region is in the tenth month of reviewing one of the company's AMP requests. Additionally, one commenter suggested that the EPA revise the "existing source" definition in 40 CFR part 63, subpart AA and 40 CFR part 63, subpart BB to extend the compliance date (for the liquid-to-gas ratio monitoring requirements for low-energy absorbers) to those new sources that were in operation on the date the technology review and residual risk review were proposed.

Based on these comments, we agree that more time beyond what we proposed is needed to achieve compliance with the liquid-to-gas ratio monitoring requirements for low-energy absorbers. To allow time to evaluate all monitoring options, obtain and certify instruments, establish operating limits, and, in certain cases, develop a regression model or AMP, the EPA is finalizing a compliance date that is no later than August 19, 2018.² This extension provides a total of 3 years from promulgation (of the August 19, 2015, amendments to 40 CFR part 63, subparts AA and BB) for sources to comply with the rule, and is the maximum compliance period allowed by the CAA. We also agree with the commenter that the compliance date should apply to certain new sources. This was an error in the December 9, 2016, proposal as we did not intend for the compliance date to apply to only existing sources. Therefore, in this action, the EPA is correcting this error at footnote b for Table 3 to subpart AA of 40 CFR part 63 and footnote b for Table 3 to subpart BB of 40 CFR part 63 such that the compliance date for the liquid-to-gas ratio monitoring requirements for low-energy absorbers applies to both existing sources and those new sources that commenced construction or reconstruction after December

² Refer to finalized footnote b of Table 3 to subpart AA of 40 CFR part 63 and Table 3 to subpart BB of 40 CFR part 63.

27, 1996, and on or before August 19, 2015. We are also clarifying that new sources that commence construction or reconstruction after August 19, 2015, must comply with the monitoring requirements for absorbers immediately upon startup. Instead of revising the “existing source” definition as requested by the commenter, we determined it will be clearer and more straightforward to make the corrections in these footnotes.

Furthermore, one commenter requested that the EPA add more compliance options for low-energy absorbers in advance of the compliance date for the liquid-to-gas ratio monitoring requirements. The commenter asserted that footnote b for Table 3 to subpart AA of 40 CFR part 63 and footnote b for Table 3 to subpart BB of 40 CFR part 63 are too narrowly drafted because they do not allow facilities to use liquid-to-gas ratio monitoring or their current monitoring strategies, such as monitoring in accordance with an already approved AMP or an applicable monitoring provision of a permit issued under 40 CFR part 70, in advance of the compliance date. This commenter suggested edits to footnote b for Table 3 to subpart AA of 40 CFR part 63 and footnote b for Table 3 to subpart BB of 40 CFR part 63 (see docket item EPA-HQ-OAR-2012-0522-0097) to allow compliance with any one of the following: (i) the monitoring requirements in Table 3 for absorbers designed and operated with pressure drops of 5 inches of water column or less; (ii) the applicable monitoring provisions of a permit issued under 40 CFR part 70 or an Alternative Monitoring Plan approved pursuant to 40 CFR 63.8(f); or (iii) the installation of continuous parameter monitoring systems (CPMS) for pressure at the gas stream inlet or outlet of the absorber, and monitoring pressure drop through the absorber. We agree with the commenter that facilities should be allowed to use liquid-to-gas ratio monitoring or their current approved monitoring strategy (in lieu of monitoring pressure drop through the absorber), in advance of the compliance date for the liquid-to-gas ratio monitoring requirements for low-

energy absorbers. Therefore, for the most part, we included the commenter's edits to footnote b for Table 3 to subpart AA of 40 CFR part 63 and footnote b for Table 3 to subpart BB of 40 CFR part 63 in the final rules. However, we added language to the commenter's edits to ensure that if an owner or operator were to use a part 70 monitoring provision, it would be a federally enforceable provision. We also split the option to use a part 70 monitoring provision and the option to use an AMP such that it is one or the other. The final rule allows an owner or operator to use liquid-to-gas ratio monitoring or their current approved monitoring strategy (in lieu of monitoring pressure drop through the absorber), in advance of the compliance date for the liquid-to-gas ratio monitoring requirements for low-energy absorbers.

Finally, one commenter requested that the EPA include language in the final rules to authorize compliance with an AMP that is still under review by an EPA Regional office beyond the compliance date for the liquid-to-gas ratio monitoring requirements, provided the AMP request was submitted to the Region more than 30 days in advance of the compliance deadline. The commenter maintained that without this type of category-specific provision, owners or operators are not entitled (based on the existing provision at 40 CFR 63.8(f)(1)) to rely on AMPs in advance of the EPA's approval. The commenter stated that although 40 CFR 63.8(f)(5)(i) calls for the Agency to respond to AMP requests within 30 days of receipt, the EPA sometimes needs more than 30 days to grant or deny such requests. The commenter asserted they are unable to predict or control the response time of the EPA; therefore, they should not be required to carry the risk and uncertainty of relying on an AMP that is still under EPA review after the compliance deadline. The commenter also stated that facility-specific extensions may not be available under CAA section 112(i)(3)(B), which authorizes a 1-year extension if "necessary for the installation of controls." The commenter contended that liquid-to-gas monitoring may require new

equipment for some low-energy absorbers, but the new equipment will likely be for absorber monitoring and not control of pollutants.

We disagree with the commenter's request to authorize compliance with AMPs that are still under the EPA review beyond the compliance date for the liquid-to-gas ratio monitoring requirements. As stated previously, we are revising and finalizing the compliance date for the liquid-to-gas ratio monitoring requirements for low-energy absorbers to no later than August 19, 2018, which is 3 years from promulgation of the final rule, and is the maximum allowed under the CAA for phosphoric acid and phosphate fertilizer manufacturers to comply with the rule. We believe this is an ample amount of time for any outstanding AMPs to be approved. Furthermore, the existing provision at 40 CFR 63.8(f)(1) has been in place for more than 20 years. During this time, the process for review and resolution of AMP requests has functioned satisfactorily within the established timelines. The concern raised by the commenter involves one unique case currently under consideration. We concluded that adopting a blanket exemption from the procedures of 40 CFR 63.8(f) for all owners or operators of the Phosphoric Acid Manufacturing and Phosphate Fertilizer Production source categories is inappropriate. This one unique case is more appropriately handled by the EPA Regional office continuing to review the technical merits of the AMP application and applying enforcement discretion to ensure equitable treatment of the company.

C. Monitoring Options for Low-Energy Absorbers

In response to the petitions the EPA received regarding monitoring requirements for low-energy absorbers, we proposed to clarify an existing monitoring option (*i.e.*, the blower design capacity option) and to add a new option (*i.e.*, the regression model option) to 40 CFR part 63, subpart AA and 40 CFR part 63, subpart BB. We also proposed language reminding affected

entities that they can request an alternative monitoring method under the provisions of 40 CFR 63.8(f) on a site-specific basis. Refer to the preamble to the proposed rule (81 FR 89026) for more details on each of these changes.

With exception of the items discussed in the following paragraphs, commenters stated that they supported these changes. Therefore, unless discussed below, we are finalizing the changes regarding monitoring requirements for low-energy absorbers as proposed.

Blower Design Capacity Option

In response to petitioner requests for clarification of the regulatory language describing the blower design capacity option for determining the gas flow rate through the absorber (for use in monitoring the liquid-to-gas ratio), we clarified in the preamble to the proposed rulemaking how this option can be used. Additionally, we proposed changing the term “design blower capacity” in Table 3 to subpart AA of 40 CFR part 63 and Table 3 to subpart BB of 40 CFR part 63 to “blower design capacity” and made other minor text edits to these tables in order to use the phrase “gas flow rate through the absorber” more consistently. We also proposed footnote c for Table 3 to subpart AA of 40 CFR part 63 and footnote c for Table 3 to subpart BB of 40 CFR part 63 to add certain site-specific monitoring plan requirements, clarify that the blower design capacity option is intended to establish the maximum possible gas flow through the absorber, and explain that the blower design capacity option can be used regardless of whether the blower is located on the influent or effluent side of the absorber. Finally, we proposed a requirement at 40 CFR 63.608(e) and 40 CFR 63.628(e) to document, in the site-specific monitoring plan, the calculations that were used to make adjustments for pressure drop if blower design capacity is used to establish the maximum possible gas flow rate through an absorber. In this action, the

EPA is finalizing, with one exception, all the proposed language regarding the blower design capacity option.

The one change to the proposed language for the blower design capacity option is our addition of language in footnote c to Table 3 to subpart AA of 40 CFR part 63 and Table 3 to subpart BB of 40 CFR part 63 to clarify that owners and operators must establish the minimum liquid-to-gas ratio operating limit by dividing the minimum liquid flow rate to the absorber determined during a performance test by the maximum possible gas flow rate through the absorber determined using blower design capacity. One commenter requested the EPA include the following additional language to footnote c to Table 3 to subpart AA of 40 CFR part 63 and Table 3 to subpart BB of 40 CFR part 63: “The maximum design gas flow through the scrubber, or Fmax, shall be determined using the blower design capacity and system pressure drop. During performance testing, the observed liquid-to-gas ratio, L/G, will be determined. The minimum liquid flow will be established by multiplying the compliance L/G by Fmax.” We disagree that the language should be added to footnote c as drafted by the commenter because it introduces a new undefined and unnecessary term “Fmax.”

We also disagree because much of the commenter’s language is already included elsewhere in the rules,³ and while the commenter’s suggested third sentence is not addressed elsewhere, it can be rewritten without the use of a new term, “Fmax.” Therefore, instead of using the commenter’s suggested third sentence, we are including a new sentence in footnote c for Table 3 to subpart AA of 40 CFR part 63 and footnote c for Table 3 to subpart BB of 40 CFR part 63 to read as follows: “Establish the minimum liquid-to-gas ratio operating limit by dividing the minimum liquid flow rate to the absorber (determined during a performance test) by the

³ Existing rule language currently in the rules that the commenter suggested is found at Table 3 to subpart AA of 40 CFR part 63; Table 3 to subpart BB of 40 CFR part 63; 40 CFR 63.605(d); at 40 CFR 63.625(d); at Table 4 to subpart AA of 40 CFR part 63 and at Table 4 to subpart BB of 40 CFR part 63.

maximum possible gas flow rate through the absorber (determined using blower design capacity).” We consider this revised sentence as clarifying how each term in the liquid-to-gas ratio is determined and used.

Regression Model Option

In response to the petitions the EPA received requesting other options to be considered for determining the gas flow rate through the absorber, which is used in monitoring the liquid-to-gas ratio, we proposed to include an option in Table 3 to subpart AA of 40 CFR part 63 and in Table 3 to subpart BB of 40 CFR part 63, that allows facilities to develop and use a regression model to determine gas flow rate through an absorber in lieu of direct measurement or using blower design capacity. We also proposed a requirement in footnote a for Table 4 to subpart AA of 40 CFR part 63 and footnote a for Table 4 to subpart BB of 40 CFR part 63 requiring continuous monitoring of blower amperage, blower static pressure, *i.e.*, fan suction pressure, and any other parameters used in the regression model that are not constants. Finally, to allow the flexibility to use best engineering judgment and calculations, we also proposed an annual requirement at 40 CFR 63.608(f) and 40 CFR 63.628(f) to document, in the site-specific monitoring plan, the calculations that were used to develop the regression model and to require that the site-specific monitoring plan be updated annually to maintain accuracy and reflect data used in the annual regression model verification.

Both commenters stated that they support the use of a regression model to determine gas flow rate through an absorber, but requested one clarification to the proposed language. The commenters requested that the EPA revise footnote d for Table 3 to subpart AA of 40 CFR part 63 and footnote d for Table 3 to subpart BB of 40 CFR part 63 to clarify whether an emissions performance test is necessary when developing and verifying gas flow regression models. The

commenters contended that the EPA should allow facilities to develop and verify gas flow regression models separately from the required annual emissions performance test. One commenter maintained that requiring facilities to conduct a performance test to develop a regression model would waste resources and needlessly complicate the schedule for liquid-to-gas ratio monitoring. The commenter contended that facilities would have to conduct more than one performance test in a year's time to first develop a regression model and then set operating limits for liquid-to-gas ratio. The commenters suggested edits to footnote d for Table 3 to subpart AA of 40 CFR part 63 and footnote d for Table 3 to subpart BB of 40 CFR part 63 (see docket items EPA-HQ-OAR-2012-0522-0097 and EPA-HQ-OAR-2012-0522-0098) to make clear that an emissions performance test is not required to develop and verify gas flow regression models. We agree with the commenters' edits to footnote d as it was our intent to allow facilities the flexibility to develop and verify gas flow regression models (using direct measurements of gas flow rate, for example, via EPA Method 2) either separately from, or in conjunction with, the annual performance test. Therefore, in this action, the EPA is finalizing, with one change, all the proposed language regarding the regression model option. The one change we are making to the proposed language is that we are revising and clarifying footnote d for Table 3 to subpart AA of 40 CFR part 63 and footnote d for Table 3 to subpart BB of 40 CFR part 63 to convey that direct measurements of gas flow rate used to develop or verify regression models may be collected during, or separately from, the annual performance testing that is required in 40 CFR 63.606(b) for subpart AA or 40 CFR 63.626(b) for subpart BB.

D. Restoration of the ± 20 -Percent Minimum Liquid Flow Rate Variability Allowance

The June 10, 1999, MACT rules (64 FR 31358) included provisions to account for the variability in absorber (*i.e.*, scrubber) pressure drop and the variability in minimum liquid flow

rate to the absorber. Specifically, as a compliance monitoring provision of the 1999 MACT rules, owners/operators are required to conduct a performance test to determine the baseline average value for both the pressure drop and for the minimum liquid flow rate of the absorber, and are then allowed to operate within a range that is within 20 percent of this rate.

The August 19, 2015 (80 FR 50386), RTR final rule included the allowance for the ± 20 -percent variability in the absorber pressure drop, but did not include the allowance for the ± 20 -percent variability in the minimum liquid flow rate to the absorber.

Industry brought this omission to our attention after the comment period for this reconsideration rule. We subsequently reviewed the record for the August 2015 RTR final rule and could not find any record of a decision to remove the ± 20 -percent minimum liquid flow rate variability provision. Therefore, we have concluded that this omission was an inadvertent error in the August 2015 RTR final rule, and we are restoring that provision in these final rules. Subpart AA includes this restored provision at 40 CFR 63.605(d)(1)(ii)(A) and subpart BB includes this restored provision at 40 CFR 63.625(d)(1)(ii)(A).

IV. Impacts Associated With This Final Rule

This action revises compliance dates specific to oxidation reactors in the Phosphoric Acid Manufacturing source category, and absorber monitoring in both the Phosphoric Acid Manufacturing and Phosphate Fertilizer Production source categories. We expect the additional compliance time for oxidation reactors to comply with the rule will have an insignificant effect on a phosphoric acid manufacturing plant's overall emissions.

Specifically, in the reconsideration proposal, the EPA discussed hydrogen fluoride emissions reductions of 0.047 tons per year (tpy) from the oxidation reactor (*i.e.*, a reduction from 0.049 tpy to 0.002 tpy) and TF emissions reductions of 0.14 tpy from the oxidation reactor

(i.e., a reduction from 0.147 tpy to 0.007 tpy). The additional 2-year compliance time for oxidation reactors to meet the emission limits in the final rule result in an additional 0.098 tons (196 pounds) of hydrogen fluoride and 0.28 tons (560 pounds) of total fluoride. Hydrogen fluoride emissions from SPA process lines, including oxidation reactors, account for less than 1 percent of all hydrogen fluoride emissions from the source category.

The revisions related to the gas flow calculation that we are finalizing result in capital cost savings of \$88,200 per facility, and capital cost savings of \$1,147,200 industry-wide.⁴ These cost savings are due to our providing alternatives to the requirement to use a gas flow meter for monitoring gas flow at low energy absorbers. In addition to the gas flow meter, we are providing two other monitoring methods as alternative compliance options: (1) a blower design capacity model; and (2) a regression model.

Table 2. Cost Comparison of Different Options for Determining Gas Flow Rate at Low Pressure Absorbers.

Compliance Option	Capital Costs per Facility	Annualized Facility Costs (2016\$)		Industry Wide Capital Costs ¹	Annualized Industry Wide Costs (2016\$)	
		3%	7%		3%	7%
Blower Design Capacity Model	\$6,400	\$800	\$960	\$83,700	\$10,300	\$12,500
Regression Model	\$4,200	\$500	\$600	\$54,300	\$6,700	\$8,100
Gas Flow Meter	\$92,400	\$15,800	\$18,200	\$1,201,500	\$205,900	\$236,100

¹ Capital costs per facility are rounded values. Industry-wide capital costs are calculated by multiplying the non-rounded values for capital costs per facility by 13 (the total number of facilities in the source category). The resulting product is rounded after calculation.

⁴ For the detailed calculations on these cost savings, refer to “Detailed Costs of Monitoring Gas Flow Options Worksheet June 2017.xlsx” and “Annualized Cost of Monitoring Options Worksheet.xlsx” which are available in the docket for this rule.

The costs described in this action are a result of only the final reconsideration notice, and show a cost savings. The costs were calculated at both a 7-percent rate and a 3-percent rate.

There is a reduction in estimated annualized costs calculated at both the 7-percent rate and at the 3-percent rate as a result of all 13 affected facilities implementing a lower cost option to monitor the ratio of liquid-to-gas in low energy absorbers, as compared to the cost of that requirement in the rule promulgated in August 2015. We note that the cost savings presented here are not associated with any change in emission limit, do not result in higher hazardous air pollutant emissions, and do not have a negative effect on human health or the environment.

Table 3. Total Potential Capital and Annualized Savings from Monitoring Alternatives for Subparts AA and BB (2016\$)

Total Capital Cost Savings	Total Annual Cost Savings (2016\$)
\$1,147,000	\$208,000 (3% discount rate)
	\$237,000 (7% discount rate)

V. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at <http://www2.epa.gov/laws-regulations/laws-and-executive-orders>.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control number 2060-0361. With this action, the EPA is

finalizing amendments to 40 CFR part 63, subpart AA and 40 CFR part 63, subpart BB that are mainly clarifications to existing rule language to aid in implementation issues raised by stakeholders, or are being made to allow more time for compliance. Therefore, there are no changes to the information collection requirements of the August 19, 2015, final rule, and, consequently, the information collection estimate of projected costs and hour burden from the final rules have not been revised.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. This action finalizes amendments to the 40 CFR part 63, subpart AA and 40 CFR part 63, subpart BB that are mainly clarifications to existing rule language to aid in implementation issues raised by stakeholders, or are being made to allow more time for compliance.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. This action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments, on the relationship between the

federal government and Indian tribes, or on the distribution of power and responsibilities between the federal government and Indian tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action finalizes amendments to 40 CFR part 63, subpart AA and 40 CFR part 63, subpart BB that are mainly clarifications to existing rule language to aid in implementation issues raised by stakeholders, or are being made to allow more time for compliance. We expect the additional compliance time for oxidation reactors will have an insignificant effect on a phosphoric acid manufacturing plant's overall emissions. Hydrogen fluoride emissions from SPA process lines, including oxidation reactors, account for less than 1 percent of all hydrogen fluoride emissions from the source category. Therefore, the amendments should not appreciably increase risk for any populations.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve new technical standards.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does *not* have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). The Environmental Justice finding in the August 19, 2015, final rule remains relevant in this action, which finalizes amendments to these rules that are mainly clarifications to existing rule language to aid in implementation issues raised by stakeholders, or are being made to allow more time for compliance. We expect the additional compliance time for oxidation reactors will have an insignificant effect on any phosphoric acid manufacturing plant's overall emissions. Hydrogen fluoride emissions from SPA process lines, including oxidation reactors, account for less than 1 percent of all hydrogen fluoride emissions from the source category. Therefore, the amendments should not appreciably increase the risk for any populations.

K. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedure, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements.

Dated: September 13, 2017.

E. Scott Pruitt,
Administrator.

For the reasons stated in the preamble, part 63 of title 40, chapter I, of the Code of Federal Regulations is amended as follows:

**PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR
POLLUTANTS FOR SOURCE CATEGORIES**

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

**Subpart AA—National Emission Standards for Hazardous Air Pollutants from Phosphoric
Acid Manufacturing Plants**

2. Section 63.605(d)(1)(ii)(A) is revised to read as follows:

§ 63.605 Operating and monitoring requirements.

* * * * *

(d) * * *

(1) * * *

(ii) * * *

(A) The allowable range for the daily averages of the pressure drop across an absorber and of the flow rate of the absorber liquid to each absorber in the process absorbing system, or secondary voltage for a wet electrostatic precipitator, is ± 20 percent of the baseline average value determined in paragraph (d)(1)(i) of this section. The Administrator retains the right to reduce the ± 20 percent adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard. However, the adjustment must not be reduced to less than ± 10 percent under any instance.

* * * * *

3. Section 63.608 is amended by adding paragraphs (e) and (f) to read as follows:

§ 63.608 General requirements and applicability of general provisions of this part.

* * * * *

(e) If you use blower design capacity to determine the gas flow rate through the absorber for use in the liquid-to-gas ratio as specified in Table 3 to this subpart, then you must include in the site-specific monitoring plan specified in paragraph (c) of this section calculations showing how you determined the maximum possible gas flow rate through the absorber based on the blower's specifications (including any adjustments you made for pressure drop).

(f) If you use a regression model to determine the gas flow rate through the absorber for use in the liquid-to-gas ratio as specified in Table 3 to this subpart, then you must include in the site-specific monitoring plan specified in paragraph (c) of this section the calculations that were used to develop the regression model, including the calculations you use to convert amperage of the blower to brake horsepower. You must describe any constants included in the equations (*e.g.*, efficiency, power factor), and describe how these constants were determined. If you want to change a constant in your calculation, then you must conduct a regression model verification to confirm the new value of the constant. In addition, the site-specific monitoring plan must be updated annually to reflect the data used in the annual regression model verification that is described in Table 3 to this subpart.

Table 1 to Subpart AA of Part 63 [Amended]

4. Table 1 to Subpart AA of Part 63, footnote "c" is amended by removing the text "August 19, 2016," and adding the text "August 19, 2018," in its place.

Table 2 to Subpart AA of Part 63 [Amended]

5. Table 2 to Subpart AA of Part 63, footnote "c" is amended by removing the text "August 19, 2016," and adding the text "August 19, 2018," in its place.

6. Table 3 to subpart AA of part 63 is amended by:

- a. Revising the column headings for “And you must monitor...” and “And...”;
- b. Revising the entry for “Install CPMS for liquid and gas flow at the inlet of the absorber”; and
- c. Adding footnotes “a” through “d” at the end of the table.

The revisions and additions read as follows:

Table 3 to Subpart AA of Part 63—Monitoring Equipment Operating Parameters

You must ...	If ...	And you must monitor ...^a	And ...^a
* * *	* * *		
Install CPMS for liquid and gas flow at the inlet of the absorber ^b	<p>Your absorber is designed and operated with pressure drops of 5 inches of water column or less; or</p> <p>Your absorber is designed and operated with pressure drops of 5 inches of water column or more, and you choose to monitor the liquid-to-gas ratio, rather than only the influent liquid flow, and you want the ability to lower liquid flow with changes in gas flow</p>	Liquid-to-gas ratio as determined by dividing the influent liquid flow rate by the gas flow rate through the absorber. The units of measure must be consistent with those used to calculate this ratio during the performance test	<p>You must determine the gas flow rate through the absorber by:</p> <p>Measuring the gas flow rate at the absorber inlet or outlet;</p> <p>Using the blower design capacity, with appropriate adjustments for pressure drop;^c or</p> <p>Using a regression model.^d</p>
* * *	* *		

^aTo monitor an operating parameter that is not specified in this table (including process-specific techniques not specified in this table to determine gas flow rate through an absorber), you must request, on a site-specific basis, an alternative monitoring method under the provisions of 40 CFR 63.8(f).

^bFor new sources that commence construction or reconstruction after August 19, 2015, the compliance date is immediately upon startup. For existing sources, and new sources that commence construction or reconstruction after December 27, 1996, and on or before August 19, 2015, if your absorber is designed and operated with pressure drops of 5 inches of water column or less, then the compliance date is August 19, 2018. In the interim, for existing sources, and new sources that commence construction or reconstruction after December 27, 1996, and on or before

August 19, 2015, with an absorber designed and operated with pressure drops of 5 inches of water column or less, you must comply with one of the following: (i) The monitoring requirements in this Table 3 for absorbers designed and operated with pressure drops of 5 inches of water column or less; (ii) the applicable monitoring provisions included in a permit issued under 40 CFR part 70 to assure compliance with subpart AA; (iii) the applicable monitoring provisions of an Alternative Monitoring Plan approved pursuant to §63.8(f); or (iv) install CPMS for pressure at the gas stream inlet and outlet of the absorber, and monitor pressure drop through the absorber.

^cIf you select this option, then you must comply with § 63.608(e). The option to use blower design capacity is intended to establish the maximum possible gas flow through the absorber; and is available regardless of the location of the blower (influent or effluent), as long as the gas flow rate through the absorber can be established. Establish the minimum liquid-to-gas ratio operating limit by dividing the minimum liquid flow rate to the absorber (determined during a performance test) by the maximum possible gas flow rate through the absorber (determined using blower design capacity).

^dIf you select this option, then you must comply with § 63.608(f). The regression model must be developed using direct measurements of gas flow rate, and design fan curves that correlate gas flow rate to static pressure (*i.e.*, fan suction pressure) and brake horsepower of the blower. You must conduct an annual regression model verification using direct measurements of gas flow rate to ensure the correlation remains accurate. Direct measurements of gas flow rate used to develop or verify regression models may be collected during, or separately from, the annual performance testing that is required in § 63.606(b).

7. Table 4 to subpart AA of part 63 is amended by revising the entry for “Influent liquid flow rate and gas stream flow rate” and adding footnote “a” at the end of the table to read as follows:

Table 4 to Subpart AA of Part 63—Operating Parameters, Operating Limits and Data Monitoring, Recordkeeping and Compliance Frequencies

For the operating parameter applicable to you, as specified in Table 3 ...	You must establish the following operating limit ...	And you must monitor, record, and demonstrate continuous compliance using these minimum frequencies ...		
		Data measurement	Data recording	Data averaging period for compliance
* * *	* * *	*		
Influent liquid flow rate and gas stream flow rate	Minimum influent liquid-to-gas ratio ^a	Continuous	Every 15 minutes	Daily
* * *	* * *	*		

^aIf you select the regression model option to monitor influent liquid-to-gas ratio as described in Table 3 to this subpart, then you must also continuously monitor (*i.e.*, record every 15 minutes,

and use a daily averaging period) blower amperage, blower static pressure (*i.e.*, fan suction pressure), and any other parameters used in the regression model that are not constants.

Subpart BB—National Emission Standards for Hazardous Air Pollutants from Phosphate Fertilizers Production Plants

8. Section 63.625(d)(1)(ii)(A) is revised to read as follows:

§ 63.625 Operating and monitoring requirements.

* * * * *

(d) * * *

(1) * * *

(ii) * * *

(A) The allowable range for the daily averages of the pressure drop across an absorber and of the flow rate of the absorber liquid to each absorber in the process absorbing system, or secondary voltage for a wet electrostatic precipitator, is ± 20 percent of the baseline average value determined in paragraph (d)(1)(i) of this section. The Administrator retains the right to reduce the ± 20 percent adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard. However, the adjustment must not be reduced to less than ± 10 percent under any instance.

* * * * *

9. Section 63.628 is amended by adding paragraphs (e) and (f) to read as follows:

§ 63.628 General requirements and applicability of general provisions of this part.

* * * * *

(e) If you use blower design capacity to determine the gas flow rate through the absorber for use in the liquid-to-gas ratio as specified in Table 3 to this subpart, then you must include in

the site-specific monitoring plan specified in paragraph (c) of this section calculations showing how you determined the maximum possible gas flow rate through the absorber based on the blower's specifications (including any adjustments you made for pressure drop).

(f) If you use a regression model to determine the gas flow rate through the absorber for use in the liquid-to-gas ratio as specified in Table 3 to this subpart, then you must include in the site-specific monitoring plan specified in paragraph (c) of this section the calculations that were used to develop the regression model, including the calculations you use to convert amperage of the blower to brake horsepower. You must describe any constants included in the equations (*e.g.*, efficiency, power factor), and describe how these constants were determined. If you want to change a constant in your calculation, then you must conduct a regression model verification to confirm the new value of the constant. In addition, the site-specific monitoring plan must be updated annually to reflect the data used in the annual regression model verification that is described in Table 3 to this subpart.

10. Table 3 to subpart BB of part 63 is amended by:

- a. Revising the column headings for “And you must monitor...” and “And...”;
- b. Revising the entry for “Install CPMS for liquid and gas flow at the inlet of the absorber”; and
- c. Adding footnotes “a” through “d” at the end of the table.

The revisions and additions read as follows:

Table 3 to Subpart BB of Part 63—Monitoring Equipment Operating Parameters

You must...	If...	And you must monitor...^a	And...^a
* * *	* * *		

You must...	If...	And you must monitor...^a	And...^a
* * *	* * * *		
Install CPMS for liquid and gas flow at the inlet of the absorber ^b	<p>Your absorber is designed and operated with pressure drops of 5 inches of water column or less; or</p> <p>Your absorber is designed and operated with pressure drops of 5 inches of water column or more, and you choose to monitor the liquid-to-gas ratio, rather than only the influent liquid flow, and you want the ability to lower liquid flow with changes in gas flow</p>	Liquid-to-gas ratio as determined by dividing the influent liquid flow rate by the gas flow rate through the absorber. The units of measure must be consistent with those used to calculate this ratio during the performance test	<p>You must determine the gas flow rate through the absorber by:</p> <p>Measuring the gas flow rate at the absorber inlet or outlet;</p> <p>Using the blower design capacity, with appropriate adjustments for pressure drop;^c or</p> <p>Using a regression model.^d</p>
* * *	* * * *		

^aTo monitor an operating parameter that is not specified in this table (including process-specific techniques not specified in this table to determine gas flow rate through an absorber), you must request, on a site-specific basis, an alternative monitoring method under the provisions of § 63.8(f).

^bFor new sources that commence construction or reconstruction after August 19, 2015, the compliance date is immediately upon startup. For existing sources, and new sources that commence construction or reconstruction after December 27, 1996, and on or before August 19, 2015, if your absorber is designed and operated with pressure drops of 5 inches of water column or less, then the compliance date is August 19, 2018. In the interim, for existing sources, and new sources that commence construction or reconstruction after December 27, 1996, and on or before August 19, 2015, with an absorber designed and operated with pressure drops of 5 inches of water column or less, you must comply with one of the following: (i) The monitoring requirements in this Table 3 for absorbers designed and operated with pressure drops of 5 inches of water column or less; (ii) the applicable monitoring provisions included in a permit issued under 40 CFR part 70 to assure compliance with subpart BB; (iii) the applicable monitoring provisions of an Alternative Monitoring Plan approved pursuant to §63.8(f); or (iv) install CPMS for pressure at the gas stream inlet and outlet of the absorber, and monitor pressure drop through the absorber.

^cIf you select this option, then you must comply with § 63.628(e). The option to use blower design capacity is intended to establish the maximum possible gas flow through the absorber; and is available regardless of the location of the blower (influent or effluent), as long as the gas flow rate through the absorber can be established. Establish the minimum liquid-to-gas ratio operating limit by dividing the minimum liquid flow rate to the absorber (determined during a

performance test) by the maximum possible gas flow rate through the absorber (determined using blower design capacity).

^dIf you select this option, then you must comply with § 63.628(f). The regression model must be developed using direct measurements of gas flow rate, and design fan curves that correlate gas flow rate to static pressure (*i.e.*, fan suction pressure) and brake horsepower of the blower. You must conduct an annual regression model verification using direct measurements of gas flow rate to ensure the correlation remains accurate. Direct measurements of gas flow rate used to develop or verify regression models may be collected during, or separately from, the annual performance testing that is required in § 63.626(b).

11. Table 4 to subpart BB of part 63 is revised to read as follows:

Table 4 to Subpart BB of Part 63—Operating Parameters, Operating Limits and Data Monitoring, Recordkeeping and Compliance Frequencies

For the operating parameter applicable to you, as specified in Table 3 ...	You must establish the following operating limit during your performance test ...	And you must monitor, record, and demonstrate continuous compliance using these minimum frequencies ...		
		Data measurement	Data recording	Data averaging period for compliance
Absorbers (Wet Scrubbers)				
Influent liquid flow	Minimum inlet liquid flow	Continuous	Every 15 minutes	Daily
Influent liquid flow rate and gas stream flow rate	Minimum influent liquid-to-gas ratio ^a	Continuous	Every 15 minutes	Daily
For the operating parameter applicable to you, as specified in Table 3	You must establish the following operating limit	And you must monitor, record, and demonstrate continuous compliance using these minimum frequencies...		
		Data measurement	Data recording	Data averaging period for compliance
Pressure drop	Pressure drop range	Continuous	Every 15 minutes	Daily
Sorbent Injection				
Sorbent injection rate	Minimum injection rate	Continuous	Every 15 minutes	Daily
Sorbent injection carrier gas flow rate	Minimum carrier gas flow rate	Continuous	Every 15 minutes	Daily

For the operating parameter applicable to you, as specified in Table 3 ...	You must establish the following operating limit during your performance test ...	And you must monitor, record, and demonstrate continuous compliance using these minimum frequencies ...		
		Data measurement	Data recording	Data averaging period for compliance
Fabric Filters				
Alarm time	Maximum alarm time is not established on a site-specific basis but is specified in §63.605(f)(9).	Continuous	Each date and time of alarm start and stop	Maximum alarm time specified in §63.605(f)(9)
Wet Electrostatic Precipitator				
Secondary voltage	Secondary voltage range	Continuous	Every 15 minutes	Daily